

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Tidewater Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Metro Machine Corporation
Norfolk, Virginia
Permit No. VA60134

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Metro Machine Corporation has applied for a Title V Operating Permit for its ship repair facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:_____

Air Permit Manager:_____ Date:_____

Regional Permit Manager:_____ Date:_____

FACILITY INFORMATION

Permittee

Metro Machine Corporation
P.O. Box 1860
Norfolk, Virginia 23501

Facility

Metro Machine Corporation
200 Ligon Street
Norfolk, Virginia

AIRS Id. No. 51-710-00034

SOURCE DESCRIPTION

SIC Code: 3731 – Ship Repair and Conversion

Several processes occur at the facility including the following: abrasive blasting and applying marine coatings; includes boilers producing steam for use onboard vessels while docked, generators, fire pumps, cranes, portable welders, fork lifts, portable heaters, electroplating, waste distillation, wood working, paint mixing, air conditioner maintenance, degreasing, use of adhesives, storage tanks and containers, gasoline and diesel fuel loading pumps, and an oil/water separator and treatment system. Alternative operating scenarios involve the use of the Compliant All Position Enclosure (CAPE) system for use with noncompliant or compliant coatings including a barge with a generator, compressors, blowers, a regenerative thermal oxidizer and a cartridge dust collector system. Two dry docks exist at the facility: the Old Dominion and the SPEEDE.

The facility is a Title V major source of nitrogen oxides and hazardous air pollutants. This source is located in an attainment area for all pollutants. The facility was previously permitted under four Minor NSR Permits. One was issued on August 1, 1984, and amended on April 23, 1986. The second was issued on January 3, 1986. The third was issued on November 13, 2000. The fourth was issued on June 26, 2002.

COMPLIANCE STATUS

The facility is inspected once a year. The last inspection was conducted on May 8, 2001. The facility was in compliance at that time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit Id.	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD Id.	Pollutant Controlled	Applicable Permit Date
1	Kewanee Boiler H35-750-G02 Natural gas / #2 fuel oil fired	32.0 mmBtu/hr				8/1/1984, amended 4/23/1986
2	Kewanee Boiler H3S500-G Natural gas / #2 fuel oil fired	20.9 mmBtu/hr				1/3/1986
3	Dry Dock Boiler #2 fuel oil fired	6.7 mmBtu/hr				
4	CAPE Barge Caterpillar Diesel Generator – Model D35086 DITA, 8 cylinders, 4 cycle and turbocharged with catalytic converter Diesel fuel fired	1,000 HP output				11/13/2000
5, 6, 7	#1, #2, and #3 CAPE Barge Caterpillar Diesel Compressor – Model 3406 DITA, 6 cylinders, 4 cycle with catalytic converter Diesel fuel fired	440 HP output, each				11/13/2000
8, 9	#1 and #2 CAPE Barge Caterpillar Diesel Blower – Model 3116 DITA, 6 cylinders, 4 cycle with catalytic converter Diesel fuel fired	175 HP output, each				11/13/2000
10	Dry Dock Abrasive Blasting	1,000 sq. ft/hr (8 operators)	Containment Screens	1	PM10	
10	Dry Dock Abrasive Blasting using CAPE Alternative Scenario		Torit Cartridge Dust Collector	7	PM10	
17	Dry Dock Underwater Hull Airless Spray Painting	42 gallons/hr (6 painters)	Containment Screens	1	PM10	
18	Dry Dock Freeboard Airless Spray Painting	42 gallons/hr (6 painters)	Containment Screens	1	PM10	

Emission Unit Id.	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD Id.	Pollutant Controlled	Applicable Permit Date
17, 18	Dry Dock Painting using CAPE Alternative Scenario		Torit Cartridge Dust Collector	7	PM10, Inorganic HAPs	
17, 18	Dry Dock Painting using CAPE Alternative Scenario		Durr Regenerative Thermal Oxidizer	8	PM10, VOCs, VOHAPs	
19	Dry Dock Top Side / Interior Hand Roll / Brush and Airless Spray Painting	7 gallons/hr (2 painters)	Containment Screens when airless spray guns are used	1	PM10	
20	Dry Dock Non-Skid / Deck Hand Roll / Brush and Airless Spray Painting	7 gallons/hr (2 painters)	Containment Screens when airless spray guns are used	1	PM10	
21	Pier Side Interior / Top Side Hand Roll / Brush and Airless Spray Painting	7 gallons/hr (2 painters)	Containment Screens when airless spray guns are used	1	PM10	
22	Production Shop and Yard Hand Roll / Brush Painting	3 gallons/hr (2 painters)				
23	Paint Shop Priming – 60% Hand Roll / Brush and 40% Airless Spray Painting	7 gallons/hr (2 painters)				
24	Maintenance Shop Degreaser	20 gallons capacity	Cover for degreaser and 15-second parts draining	9	VOCs	
25	Outside Machine Shop Degreasers (2)	40 gallons capacity each	Cover for degreaser and 15-second parts draining	10	VOCs	
26	Compressor / Fire Pump Maintenance Area Degreaser	15 gallons capacity	Cover for degreaser and 15-second parts draining	11	VOCs	
27	Inside Machine Shop Degreasers (2)	20 and 40 gallons capacity	Cover for degreaser and 15-second parts draining	12	VOCs	
28	SPEEDE Dry Dock Painting					06/26/2002
98, 99	SPEEDE Dry Dock Generators (2)	2,514 HP, each				06/26/2002

EMISSIONS INVENTORY

The Calendar Year 2001 emissions are summarized in the following tables.

	VOC	CO	SO ₂	PM ₁₀	NO _x
TOTAL	22.8	3.6	0.03	17.8	4.2

EMISSION UNIT APPLICABLE REQUIREMENTS – Kewanee Boiler H35-750-G02

Requirements: Emission Unit 1

This emission unit is previously permitted with a New Source Review permit issued August 1, 1984 and amended April 23, 1986. This unit was constructed prior to the NSPS Subpart Dc applicability date.

Limitations

The following limitations are derived from the NSR permit issued August 1, 1984 and amended April 23, 1986:

NSR Specific Condition 4: boiler shall consume no more than 95 million cubic feet of gas or 710,000 gallons of No.2 oil per year.

NSR Specific Condition 5: emissions from the operation of the boiler shall not exceed the limits specified.

NSR Specific Condition 6: approved fuels for the boiler are natural gas or No. 2 fuel oil.

The following Virginia Administrative Codes have been determined to be applicable, and have been incorporated into the Facility-Wide section of the operating permit:

9 VAC 5-50-20	Compliance for New Sources
9 VAC 5-50-30	Performance Testing for New Sources
9 VAC 5-50-50	Notification, Records and Reporting
9 VAC 5-50-80	Standard for Visible Emissions for New Sources

Monitoring

The permit includes a requirement for monthly visual evaluations of the boiler stack for compliance with the opacity limitation.

No periodic monitoring for the emissions limits for criteria pollutants is required in the permit. The following demonstration is provided to show that there is not a great likelihood that the emission limits will be exceeded:

Emission Unit Size = 32.0 mmBtu/hr
Heating Value of Distillate Fuel = 138,000 Btu/gal
Sulfur Content of Fuel = 0.5%
Fuel Throughput = 710,000 gallons
Hourly Throughput = (32.0 mmBtu/hr)/(138,000 Btu/gal) = 231.9 gal/hr

Emission Factors from AP42 (Fuel Oil Combustion, 9/98) for distillate fuel

SO ₂	142S lb/1000 gal
PM ₁₀	1.08 lb/1000 gal

SO₂ emissions:

$((142) \times (0.5) / 1000) \text{ lb/gal} \times (231.9 \text{ gal/hr}) = \mathbf{16.5 \text{ lb/hr SO}_2}$
Title V permitted rate = **19.1 lb/hr SO₂**

$((142) \times (0.5) / 1000) \text{ lb/gal} \times (710,000 \text{ gal/yr}) / (2000 \text{ lb/ton}) = \mathbf{25.2 \text{ tons/yr SO}_2}$
Title V permitted rate = **30.2 tons/yr SO₂**

$(16.5 \text{ lb/hr SO}_2) / (32.0 \text{ mmBtu/hr}) = \mathbf{0.5 \text{ lb/mmBtu}}$
Title V permitted rate = **0.6 lb/mmBtu**

PM emissions:

$((1.08) / (1000) \text{ lb/gal}) \times (231.9 \text{ gal/hr}) = \mathbf{0.3 \text{ lb/hr PM}}$
Title V permitted rate = **0.5 lb/hr PM**

$((1.08) / (1000) \text{ lb/gal}) \times (710,000 \text{ gal/yr}) / (2000 \text{ lb/ton}) = \mathbf{0.4 \text{ ton/yr PM combined}}$
Title V permitted rate = **0.8 ton/yr PM combined**

$(0.4 \text{ lb/hr PM}) / (32.0 \text{ mmBtu/hr}) = \mathbf{0.01 \text{ lb/mmBtu}}$
Title V permitted rate = **0.02 lb/mmBtu**

Based on the demonstration, it appears there is not a great likelihood that the emission limits will be exceeded, and no additional periodic monitoring other than opacity has been required for this unit.

Recordkeeping

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include fuel throughputs, records of visual evaluations and visible emissions evaluations conducted, and DEQ-approved pollutant specific emission factors and equations.

Testing

The permit does not require source tests. A table of test methods has been included in the Facility-Wide section of the operating permit if testing to demonstrate compliance is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The permit does not contain any specific reporting requirements.

Streamlined Requirements

Specific Condition 5 of the NSR permit included emission limits for particulate matter. This has been streamlined to PM10, rather than PM, because PM10 is the regulated pollutant (criteria pollutant).

EMISSION UNIT APPLICABLE REQUIREMENTS – Kewanee Boiler H3S500

Requirements: Emission Unit 2

This emission unit is previously permitted with a New Source Review permit issued January 3, 1986. This unit was constructed prior to the NSPS Subpart Dc applicability date.

Limitations

The following limitations are derived from the NSR permit issued January 3, 1986:

NSR Specific Condition 4: boiler shall consume no more than 1,200,000 gallons of No.2 oil per year or the natural gas equivalent.

NSR Specific Condition 5: emissions from the operation of the boiler shall not exceed the limits specified.

NSR Specific Condition 6: approved fuels for the boiler are natural gas and No. 2 fuel oil.

The following Virginia Administrative Codes have been determined to be applicable and have been incorporated into the Facility-Wide section of the operating permit:

9 VAC 5-50-20	Compliance for New Sources
9 VAC 5-50-30	Performance Testing for New Sources
9 VAC 5-50-50	Notification, Records and Reporting
9 VAC 5-50-80	Standard for Visible Emissions for New Sources

Monitoring

The permit includes a requirement for monthly visual evaluations of the boiler stack for compliance with the opacity limitation.

No periodic monitoring for the emissions limits for criteria pollutants is required in the permit. The following demonstration is provided to show that there is not a great likelihood that the emission limits will be exceeded:

Emission Unit Size = 20.9 mmBtu/hr
Heating Value of Distillate Fuel = 138,000 Btu/gal
Sulfur Content of Fuel = 0.5%
Fuel Throughput = 1,200,000 gallons
Hourly Throughput = (20.9 mmBtu/hr)/(138,000 Btu/gal) = 151.4 gal/hr

Emission Factors from AP42 (Fuel Oil Combustion, 9/98) for distillate fuel

SO ₂	142S lb/1000 gal
PM ₁₀	1.08 lb/1000 gal

SO₂ emissions:

$((142) \times (0.5) / 1000) \text{ lb/gal} \times (151.4 \text{ gal/hr}) = \mathbf{10.7 \text{ lb/hr SO}_2}$
Title V permitted rate = **12.7 lb/hr SO₂**

$((142) \times (0.5) / 1000) \text{ lb/gal} \times (1,200,000 \text{ gal/yr}) / (2000 \text{ lb/ton}) = \mathbf{42.6 \text{ tons/yr SO}_2}$
Title V permitted rate = **42.6 tons/yr SO₂**

$(10.7 \text{ lb/hr SO}_2) / (20.9 \text{ mmBtu/hr}) = \mathbf{0.5 \text{ lb/mmBtu}}$
Title V permitted rate = **0.6 lb/mmBtu**

PM emissions:

$((1.08) / (1000) \text{ lb/gal}) \times (151.4 \text{ gal/hr}) = \mathbf{0.2 \text{ lb/hr PM}}$
Title V permitted rate = **0.4 lb/hr PM**

$((1.08) / (1000) \text{ lb/gal}) \times (1,200,000 \text{ gal/yr}) / (2000 \text{ lb/ton}) = \mathbf{0.6 \text{ ton/yr PM}}$
Title V permitted rate = **1.2 ton/yr PM**

$(0.6 \text{ lb/hr PM}) / (20.9 \text{ mmBtu/hr}) = \mathbf{0.03 \text{ lb/mmBtu}}$
Title V permitted rate = **0.1 lb/mmBtu**

Based on the demonstration, it appears there is not a great likelihood that the emission limits will be exceeded, and no additional periodic monitoring other than opacity has been required for this unit.

Recordkeeping

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include fuel throughputs, records of visual evaluations and visible emissions evaluations conducted, and DEQ-approved pollutant specific emission factors and equations.

Testing

The permit does not require source tests. A table of test methods has been included in the Facility-Wide section of the permit if testing to demonstrate compliance is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The permit does not contain any specific reporting requirements.

Streamlined Requirements

Specific Condition 5 of the NSR permit included emission limits for particulate matter. This has been streamlined to PM10, rather than PM, because PM10 is the regulated pollutant (criteria pollutant).

EMISSION UNIT APPLICABLE REQUIREMENTS - Dry Dock Boiler Requirements: Emission Unit 3

Limitations

The following Virginia Administrative Codes have specific emission requirements have been determined to be applicable:

- 9 VAC 5-50-20 Compliance for New and Modified Sources
- 9 VAC 5-40-900 Existing Source Standard for Particulate Matter
- 9 VAC 5-40-930 Existing Source Standard for Sulfur Dioxide
- 9 VAC 5-50-80 New and Modified Source Standard for Visible Emissions

Monitoring

The permit includes a requirement for monthly visual evaluations of each stack for compliance with the opacity limitation.

No periodic monitoring for the emissions limits for criteria pollutants is required in the permit. The following demonstration is provided to show that there is not a great likelihood that the Title V emission limits will be exceeded:

Emission Unit 3 size = 6.7 million Btu/hr
Heating Value of distillate oil = 140,000 Btu/gal (from AP42)
Sulfur Content of fuel = 2.5%

Emission Unit 3 hourly rate = $(6,700,000 \text{ Btu/hr}) / (140,000 \text{ Btu/gal}) = 47.9 \text{ gal/hr}$

PM Emission Factors from AP-42 (Fuel Oil Combustion, 9/98):
Distillate Fuel = 2.0 lb/1000 gallons

SO₂ Emission Factors from AP-42 (Fuel Oil Combustion, 9/98):
Distillate Fuel = 142S lb/1000 gallons = $(142)(2.5) \text{ lb/1000 gallons} = 355.0 \text{ lb/1000 gallons}$

PM emissions for Emission Unit 3
 $(2.0 \text{ lb/1000 gallons}) \times (47.9 \text{ gal/hr}) = 0.1 \text{ lb/hr PM}$
Title V permitted rate = 4.5 **lb/hr PM**

SO₂ emissions for Emission Unit 3
 $(355.0 \text{ lb/1000 gallons}) \times (47.9 \text{ gal/hr}) = 17.0 \text{ lb/hr}$
Title V permitted rate = 17.7 **lb/hr**

Although there is not a great difference in the calculated rate and the permitted rate, it should be noted that the calculated rate is based on fuel having a sulfur content of 2.5%. In reality, the sulfur content of the fuel used at the site is much less; therefore, the actual emissions from the units will be much less than the calculated rate.

Based on the demonstration, it appears there is not a great likelihood that the Title V emission limits will be exceeded; therefore, no additional periodic monitoring other than opacity has been required for these units.

Recordkeeping

The permit includes requirements for maintaining records of emission data and operating parameters necessary to demonstrate compliance with the permit. These records include the type of fuel combusted in the boiler, records of visual evaluations, visible emissions evaluations and any corrective action taken in regard to visible emissions, and DEQ-approved, pollutant-specific emission factors and equations.

Testing

The permit does not require source tests. A table of test methods has been included in the Facility-Wide section of the permit if testing to demonstrate compliance is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The permit does not contain any specific reporting requirements for this unit.

Streamlined Requirements

The permit does not contain any streamlined requirements for this unit.

EMISSION UNIT APPLICABLE REQUIREMENTS – Internal Combustion Units: Emission Units 4, 5, 6, 7, 8 and 9

These emissions units are previously permitted with a New Source Review permit issued November 13, 2000.

Limitations

The following limitations are derived from the NSR permit issued November 13, 2000:

NSR Condition 2: PM emissions, VOC emissions and CO emissions shall be controlled by catalytic purifiers.

NSR Condition 3: approved fuel for the CAPE system diesel engines is diesel fuel (distillate oil).

NSR Condition 4: maximum sulfur content of the diesel fuel shall be 0.05% per shipment.

NSR Condition 5: permittee shall obtain a fuel supplier certification with each shipment of fuel.

NSR Condition 6: annual hours of operation shall not exceed the limits specified.

NSR Condition 7: emissions shall be controlled by proper operation and maintenance.

NSR Condition 8: emissions from the operation of the diesel engines shall not exceed the limits specified.

NSR Condition 9: visible emissions shall not exceed 20 percent opacity.

NSR Condition 15: permittee shall, upon request, reduce the level of operation or shut down the facility.

The following Virginia Administrative Codes have been determined to be applicable and have been incorporated into the Facility-Wide section of the operating permit:

9 VAC 5-50-20	Compliance for New Sources
9 VAC 5-50-30	Performance Testing for New Sources
9 VAC 5-50-50	Notification, Records and Reporting
9 VAC 5-50-80	Standard for Visible Emissions for New Sources

Monitoring

The permit includes a requirement for monthly visual evaluations of each generator stack for compliance with the opacity limitation.

No periodic monitoring for the emissions limits for criteria pollutants is required in the permit. The demonstration provided in the Appendix of the Statement of Basis provides the demonstration showing there is not a great likelihood the emission limits will be exceeded if the permittee complies with the permit restrictions such as throughput and fuel sulfur content.

Recordkeeping

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include annual hours of operation for each generator, all fuel supplier certifications, records of visual evaluations and visible emissions evaluations conducted, and DEQ-approved pollutant specific emission factors and equations.

Testing

The permit does not require source tests. A table of test methods has been included in the Facility-Wide section of the permit if testing to demonstrate compliance is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The permit does not contain any specific reporting requirements.

Streamlined Requirements

There are no specific streamlined requirements for the generator units.

EMISSION UNIT APPLICABLE REQUIREMENTS – Painting Requirements When CAPE System Alternate Means of Limiting Emissions Is Not In Use: Emission Units 17, 18, 19, 20, 21, 22, 23, and 28

Emission unit 28 is previously permitted with a New Source Review/NESHAP permit issued June 26, 2002. New Source Review permits are not required for the remaining units.

Limitations

The following limitation is derived from the NSR permit issued June 26, 2002. This requirement is in addition to the requirements contained in 40 CFR part 63 subpart II.

NSR Condition 22: VOC emissions shall not exceed the limits specified.

The following Code of Federal Regulations have been determined to be applicable:

40 CFR part 63 subpart II National Emission Standards for Shipbuilding and Ship Repair

The following Virginia Administrative Code has been determined to be applicable, and is incorporated into the specific conditions of this operating permit section:

9 VAC 5-60-100 Designated Emission Standards (National Emission Standards for Hazardous Air Pollutants for Source Categories)

The following Virginia Administrative Codes have been determined to be applicable and have been included in the Facility-Wide section of this operating permit:

9 VAC 5-50-20 Compliance for New Sources
9 VAC 5-50-30 Performance Testing for New Sources
9 VAC 5-50-50 Notification, Records and Reporting

Monitoring, Recordkeeping and Reporting

Although there is an applicable opacity standard, there is no corresponding monitoring, recordkeeping and reporting requirement for it. In addition, 40 CFR part 63 subpart II does not specify an opacity requirement. There is not a great likelihood of opacity from open air coating operations.

The permittee is required to comply with the recordkeeping and reporting requirements contained in 40 CFR 63.788 for each compliance option chosen. Based on EPA guidance, compliance with the MACT satisfies compliance with periodic monitoring. No other monitoring requirements have been specified.

Streamlined Requirements

There are no specific streamlined requirements for this unit.

**EMISSION UNIT APPLICABLE REQUIREMENTS – Painting Requirements When
CAPE System Alternate Means of Limiting Emissions Is In Use: Emission Units 17 and 18**

Metro Machine Corporation applied to EPA for approval to use the CAPE System as an alternate means of limiting emissions to comply with the requirements of 40 CFR part 63 subpart II. EPA approved the alternate means of limiting emissions on June 4, 1999, with certain conditions. The conditions for approval are contained in the attachment to this June 4, 1999, letter. The June 4, 1999, letter and attachment are included as Section XVII of the permit.

**EMISSION UNIT APPLICABLE REQUIREMENTS – Abrasive Blasting Requirements:
Emission Unit 10**

Limitations

The following Virginia Administrative Codes have been determined to be applicable:

- 9 VAC 5-50-20 Compliance for Existing Sources
- 9 VAC 5-50-80 Existing Source Standard for Visible Emissions
- 9 VAC 5-50-90 Existing Source Standard for Fugitive Dust/Emissions

Monitoring and Recordkeeping

The permit does not include a recordkeeping and reporting requirement for opacity for abrasive blasting. Abrasive blasting creates fugitive emissions. Because it is not a point source, an opacity determination cannot be made.

EMISSION UNIT APPLICABLE REQUIREMENTS – Degreaser Requirements: Emission Units 24, 25, 26 and 27

Limitations

The following Virginia Administrative Codes have been determined to be applicable and are included in the specific section of the operating permit:

9 VAC 5 Chapter 40, Article 24: Emissions Standards for Solvent Metal Cleaning
Operations Using Non-Halogenated Solvents (Rule 4-24)

The following Virginia Administrative Codes have been determined to be applicable and have been included in the Facility-Wide section of the operating permit:

9 VAC 5-50-20	Compliance for New Sources
9 VAC 5-50-50	Notification, Records and Reporting
9 VAC 5-50-80	Standard for Visible Emissions for New Sources
9 VAC 5-20-180	Facility and Control Equipment Maintenance or Malfunction

Monitoring and Recordkeeping

Although the visible emission standard is applicable to these units, it is not expected that visible emissions will occur. Therefore, no visual evaluations are required.

The degreasers at the facility use Zone Defense solvent, which has a very low vapor pressure that minimizes evaporation and has no HAPs. The Zone Defense solvent vapor pressure at about 70 degrees Fahrenheit is less than 0.02 pounds per square inch. At 100 degrees Fahrenheit, its vapor pressure is still below 0.06 pounds per square inch. The solvent is not agitated, heated, or sprayed in the degreasers. The VOC emissions from these units will be minimal. As this is the case, no monitoring or recordkeeping is required.

Testing

The permit does not require source tests.

Reporting

The permit does not contain any specific reporting requirements for these units.

Streamlined Requirements

There are no streamlined requirements associated with these units.

EMISSION UNIT APPLICABLE REQUIREMENTS – SPEEDE Dry Dock Generator Requirements: Emission Units 98 and 99

Emission units 98 and 99 are previously permitted with a New Source Review/NESHAP permit issued June 26, 2002.

Limitations

The following limitations are derived from the NSR/NESHAP permit issued June 26, 2002:

NSR Condition 3: SO₂ emissions shall be controlled by using low-sulfur fuel and limiting operational hours.

NSR Condition 5: each generator shall not operate more than 500 hours per year.

NSR Condition 6: approved fuel for the generators is diesel fuel.

NSR Condition 7: maximum sulfur content per shipment of 0.05%.

NSR Condition 9: emissions from the operation of the generators shall not exceed the limits specified.

NSR Condition 10: visible emissions shall not exceed 20% opacity.

NSR Condition 34: permittee shall take measures to minimize excess emissions.

The following Virginia Administrative Codes have been determined to be applicable and have been incorporated into the Facility-Wide section of the operating permit:

9 VAC 5-50-20	Compliance for New Sources
9 VAC 5-50-30	Performance Testing for New Sources
9 VAC 5-50-50	Notification, Records and Reporting
9 VAC 5-50-80	Standard for Visible Emissions for New Sources

Monitoring and Recordkeeping

The permit includes a requirement for monthly visual evaluations of each generator stack for compliance with the opacity limitation. Additionally, the permit includes the following conditions derived from the NSR/NESHAP permit.

NSR Condition 8: permittee shall obtain a fuel certification with each fuel shipment.

NSR Condition 11: permittee shall maintain records to demonstrate compliance with the permit.

No periodic monitoring for the emissions limits for criteria pollutants is required in the permit. The demonstration provided in the Appendix of the Statement of Basis provides the demonstration showing there is not a great likelihood the emission limits will be exceeded if the permittee complies with the permit restrictions such as operational hours and fuel sulfur content.

Testing

The permit does not require source tests. A table of test methods has been included in the Facility-Wide section of the permit if testing to demonstrate compliance is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The permit does not contain any specific reporting requirements.

Streamlined Requirements

There are no streamlined requirements associated with these units.

EMISSION UNIT APPLICABLE REQUIREMENTS – Facility-Wide Conditions

Limitations

The following Virginia Administrative Codes have been determined to be applicable and have been included in the Facility-Wide section of the operating permit:

9 VAC 5-50-20	Compliance for New Sources
9 VAC 5-50-50	Notification, Records and Reporting
9 VAC 5-50-80	Standard for Visible Emissions for New Sources
9 VAC 5-20-180	Facility and Control Equipment Maintenance or Malfunction

Testing

The permit does not require source tests. A table of test methods has been included in the Facility-Wide section of the permit if testing to demonstrate compliance is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State and have been identified as applicable by the applicant:

1. 9 VAC 5 Chapter 50, Article 2, Rule 5-2 and 9 VAC 5 Chapter 40, Article 2, Rule 4-2:
Standards for Odorous Emissions
2. 9 VAC 5 Chapter 50, Article 3, Rule 5-3 and 9 VAC 5 Chapter 40, Article 3, Rule 4-3:
Standards for Toxic Pollutants

Additionally, the following is an agreement between Metro Machine and DEQ:

1. Memorandum of Understanding between Metro Machine Corporation and the Department of Environmental Quality dated February 12, 1990.

FUTURE APPLICABLE REQUIREMENTS

There are no future applicable requirements for this facility.

INAPPLICABLE REQUIREMENTS

The facility has not identified any inapplicable requirements.

COMPLIANCE PLAN

There is no compliance plan associated with this facility.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
11	Enclosed Bead Blaster in Outside Machine Shop	9 VAC 5-80-720 B	PM10	
12	Enclosed Bead Blaster in Boiler Shop	9 VAC 5-80-720 B	PM10	
13	Enclosed Bead Blaster in Compressor/Fire Pump Maintenance Area	9 VAC 5-80-720 B	PM10	
14	Enclosed Bead Blaster in Inside Machine Shop	9 VAC 5-80-720 B	PM10	
15	Enclosed Bead Blaster in Electric Shop	9 VAC 5-80-720 B	PM10	
16	Air Conditioner Maintenance	9 VAC 5-80-720 B	VOC	
28	Cape Barge Natural Gas/Propane Boiler	9 VAC 5-80-720 C		3.0 mmBtu/hr
29	Detroit Diesel 253 Emergency Generator	9 VAC 5-80-720 C		55 HP
30	Dry Dock Detroit Diesel 671 Fire Pump	9 VAC 5-80-720 C		235 HP
31	Wet Slip Detroit Diesel 671 Fire Pump	9 VAC 5-80-720 C		235 HP
32	Finger Pier Cummins Diesel 903 Fire Pump	9 VAC 5-80-720 C		240 HP
33	#1 P&H Diesel Truck Crane	9 VAC 5-80-720 A		125 HP
34	#2 Detroit Diesel Truck Crane	9 VAC 5-80-720 A		157 HP
35	#3 Detroit Diesel Truck Crane	9 VAC 5-80-720 A		165 HP
36	#4 Detroit Diesel Crawler Crane	9 VAC 5-80-720 A		264 HP
37	#3 Perkins Diesel Welder	9 VAC 5-80-720 A		49 HP
38	#4 Perkins Diesel Welder	9 VAC 5-80-720 A		55 HP
39	#5 Perkins Diesel Welder	9 VAC 5-80-720 A		49 HP
40	#8 Ford Gasoline Welder	9 VAC 5-80-720 A		75 HP
41	#10 Hobart Gasoline Welder	9 VAC 5-80-720 A		50 HP
42	#12 Perkins Diesel Welder	9 VAC 5-80-720 A		49 HP
43	#15 Perkins Diesel Welder	9 VAC 5-80-720 A		49 HP
44	#1 Nissan Propane Fork Lift	9 VAC 5-80-720 A		46 HP

45	#2 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
46	#3 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
47	#4 Nissan Propane Fork Lift	9 VAC 5-80-720 A		46 HP
48	#5 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
49	#6 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
50	#7 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
51	#8 Nissan Propane Fork Lift	9 VAC 5-80-720 A		46 HP
52	#9 Detroit Diesel Fork Lift	9 VAC 5-80-720 A		90 HP
53	#14 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
54	#15 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
55	#16 Nissan Propane Fork Lift	9 VAC 5-80-720 A		46 HP
56	#18 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
57	#20 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
58	#21 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
59	#22 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		78 HP
60	#23 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
61	#24 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		71 HP
62	#26 Chrysler Propane Fork Lift	9 VAC 5-80-720 A		78 HP
63	#29 Cummins Diesel Fork Lift	9 VAC 5-80-720 A		152 HP
64	Portable Kerosene Heaters	9 VAC 5-80-720 A		0.15 mmBtu/hr each
65	CAPE Barge Eclipse Burner for Regenerative Thermal Oxidizer	9 VAC 5-80-720 C		6.0 mmBtu/hr
66	Electroplating in Electric Shop	9 VAC 5-80-720 B	PM10, inorganic HAPs	
67	Distillation Unit in Hazardous Waste Storage Area	9 VAC 5-80-720 B	VOCs, VOHAPs	
68	Woodworking Operations in Carpenter Shop	9 VAC 5-80-720 B	PM10	
69	Paint Mixing in Paint Shop	9 VAC 5-80-720 B	VOCs, VOHAPs	
70	Welding Operations in Steel Shop and Pipe Shop	9 VAC 5-80-720 A		
71	Maintenance Shop Touch-Up Painting	9 VAC 5-80-720 B	VOCs, VOHAPs	

72	Covered Metro 88 Degreasers (2) in Tool Room (contains no solvents)	9 VAC 5-80-720 B	None	
73 – 77	Spray Can Degreasers, Cleaners, etc.	9 VAC 5-80-720 B	VOCs, VOHAPs	
78	Solvent, Oils, Hydraulic Fluids, and Antifreeze in Sealed 55-gallon Drums and Sealed Hazardous Waste Containers	9 VAC 5-80-720 A		
79	Solvents, Cleaners, Degreasers, Penetrants, and Lubricants in Spray Cans and Sealed 55-gallon drums in Tool Room	9 VAC 5-80-720 A		
80	Hazardous Waste in Sealed 55-gallon Drums in Hazardous Waste Storage Building	9 VAC 5-80-720 A		
81	Waste Oil Storage Tanks (2) in Hazardous Waste Storage Building and Portable Tankers in Yard	9 VAC 5-80-720 B	VOCs, VOHAPs	3,000 gallons each
82	Propane Storage Tank near Navy Paint Storage	9 VAC 5-80-720 B	VOCs	1,000 gallons
83	Underground Gasoline Storage Tank near Navy Paint Storage	9 VAC 5-80-720 B	VOCs, VOHAPs	10,000 gallons
84	Underground Diesel Fuel Storage Tank	9 VAC 5-80-720 A		
85	Portable Diesel (1 800-gallon, 1 500-gallon, 1 300-gallon, and 1 125-gallon) and Gasoline (125-gallon) Storage Containers in Yard	9 VAC 5-80-720 A		
86	Small Containers of Acetylene, Liquid Oxygen, Hydrogen, and Argon near Navy Paint Storage	9 VAC 5-80-720 A		
87	Navy Paint Storage Areas with 5-gallon Containers	9 VAC 5-80-720 A		
88	Varsol Storage Tank near Navy Paint Storage	9 VAC 5-80-720 B	VOCs, VOHAPs	300 gallons
89	Underground #2 Oil Storage Tanks (2) near Boiler Room	9 VAC 5-80-720 B	VOCs, VOHAPs	15,000 gallons each
90	Diesel Fuel Storage Tank in Compressor/Fire Pump Maintenance Area	9 VAC 5-80-720 B	VOCs, VOHAPs	500 gallons
91	Gasoline Loading Pumps	9 VAC 5-80-720 B	VOCs, VOHAPs	1,260 gallons/hr
92	Diesel Fuel Loading Pumps	9 VAC 5-80-720 A	VOCs, VOHAPs	840 gallons/hr

93	Oil/Water Separator and Treatment System Including Processing Tanks	9 VAC 5-80-720 B	VOCs, VOHAPs	
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¹The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

The source has not submitted a request for confidentiality.

PUBLIC PARTICIPATION

The proposed permit will be placed on public notice in the Virginian Pilot from August 21, 2002 to September 20, 2002.

APPENDIX